



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/363,642	07/30/1999	TOSHIHITO KIDO	024060	8372

21839 7590 06/20/2003

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

VILLECCO, JOHN M

ART UNIT	PAPER NUMBER
----------	--------------

2612

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/363,642

Applicant(s)

KIDO ET AL.

Examiner

John M. Villecco

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) 3,4,16 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2612

DETAILED ACTION I

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 1334g16, 1334g18, 1334g25, 1334g26, 1334g27, 1334g28 (as described on page 27 of the specification). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2612

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2 and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Kido (Japanese Pub. No. 10-079874 A) in view of Sato (Japanese Pub. No. 04-107438 A).

6. Regarding *claim 1*, Kido discloses a digital camera (1) comprising an image-sensing unit (3) that includes a taking lens group (301) and an image sensor (303). Furthermore, the camera (1) includes a camera body (2) including a series of image processors (205, 206, 207, 208, and 209) for processing the image from the image sensing unit, and a detector for detecting the connection of the image sensor. The detecting is performed by the controller (211). See paragraphs 0080 and 0087.

Kido, however, fails to disclose a power supply controller for controlling power supply in the camera in accordance with a result of the detection. Sato, on the other hand, discloses a camera that can initiate a flash using a built-in ("incorporated") flash or an externally attached flash unit. If the external flash is mounted to the camera, the built-in flash is inhibited from being charged. Inherently a detector detects if the external flash is connected or not. The lighting control means (II) E acts as the power supply controller for controlling power supply in the camera body in accordance with a result of detection. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to inhibiting charging of the built-in flash when the external flash is mounted the camera is able to eliminate the unnecessary consumption of energy.

7. As for *claim 2*, Kido discloses that the camera body (2) includes a flash control circuit (ref. no. 214, paragraph 0076).

Art Unit: 2612

8. With regard to *claim 5*, Kido discloses that the camera body (2) includes a memory card (18) and a recording image generating part (211g) for storing the image data.

9. **Claims 6-15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kido (Japanese Pub. No. 10-079874 A) in view of Arai et al. (U.S. Patent No. 6,130,717).**

10. Regarding *claim 6*, Kido discloses a digital camera (1) comprising an image-sensing unit (3) that includes a taking lens group (301) and an image sensor (303). Furthermore, the camera (1) includes a camera body (2) including a series of image processors (205, 206, 207, 208, and 209) for processing the image from the image sensing unit, and a detector for detecting the connection of the image sensor. The detecting of the connection status is performed by the controller (211). See paragraphs 0080 and 0087.

Kido, however, fails to disclose a power supply controller for controlling power supply in the camera in accordance with a result of the detection. Arai, on the other hand, discloses an interchangeable lens that is capable of detecting a connection and when a connection is not detected, power is cut off to various parts of the camera in order to conserve power. As discussed in column 8, lines 41-63, when it is detected that the lens unit (LU) is detached, switching circuit (38) is activated to prohibit supply of power supply voltages from the battery (37) to the camera portions. Although the lens unit (LU) does not include an image sensor, it would have been obvious to one of ordinary skill in the art to implement such a system in the invention of Kido so that when the image sensing unit is detached, power is cut off to parts of the camera that are not in use so that energy is conserved.

Art Unit: 2612

11. As for **claim 7**, Arai discloses that if the detachable switch (35) detects that the lens unit is not attached (i.e. the lens unit is not attached to the interface), the power supply voltages from the battery (37) are prohibited. See column 8, line 41 to column 9, line 10.

12. Regarding **claim 8**, as mentioned above, Arai discloses that it is well known in the art to supply power to an interface. Inherently, Arai would include a power supply portion for getting the power to the different parts of the camera. Therefore, when the lens is disconnected from the camera body, power would not be supplied to the lens unit since when the lens unit is detached power is cut off to each of the different parts of the camera.

13. With regard to **claim 9**, inherently the different parts of the camera would each have individual power supply portions in order for the supplied power to be provided to each of the circuits. The power supply portions would take the form of wiring. Therefore, when the lens is disconnected from the camera body, power would not be supplied to the lens unit since when the lens unit is detached power is cut off to each of the different parts of the camera. The same concept goes for each of the different parts of the camera body that do not receive power.

14. With regard to **claim 10**, Kido discloses that the camera body (2) includes a memory card (18) and a recording image generating part (211g) for storing the image data.

15. Regarding **claim 11**, Kido discloses a digital camera (1) comprising an image-sensing unit (3) that includes a taking lens group (301) and an image sensor (303). Furthermore, the camera (1) includes a camera body (2) including a series of image processors (205, 206, 207, 208, and 209) for processing the image from the image sensing unit, and a detector for detecting the connection of the image sensor. The detecting of the connection status is performed by the controller (211). See paragraphs 0080 and 0087.

Kido, however, fails to disclose a power supply controller for controlling power supply in the camera in accordance with a result of the detection. Arai, on the other hand, discloses an interchangeable lens that is capable of detecting a connection and when a connection is not detected, power is cut off to various parts of the camera in order to conserve power. As discussed in column 8, lines 41-63, when it is detected that the lens unit (LU) is detached, switching circuit (38) is activated to prohibit supply of power supply voltages from the battery (37) to the camera portions. Although the lens unit (LU) does not include an image sensor, it would have been obvious to one of ordinary skill in the art to implement such a system in the invention of Kido so that when the image sensing unit is detached, power is cut off to parts of the camera that are not in use so that energy is conserved.

16. As for *claim 12*, Arai discloses that if the detachable switch (35) detects that the lens unit is not attached (i.e. the lens unit is not attached to the interface), the power supply voltages from the battery (37) are prohibited. See column 8, line 41 to column 9, line 10.

17. Regarding *claim 13*, as mentioned above, Arai discloses that it is well known in the art to supply power to an interface. Inherently, Arai would include a power supply portion for getting the power to the different parts of the camera. Therefore, when the lens is disconnected from the camera body, power would not be supplied to the lens unit since when the lens unit is detached power is cut off to each of the different parts of the camera.

18. With regard to *claim 14*, inherently the different parts of the camera would each have individual power supply portions in order for the supplied power to be provided to each of the circuits. The power supply portions would take the form of wiring. Therefore, when the lens is disconnected from the camera body, power would not be supplied to the lens unit since when the

Art Unit: 2612

lens unit is detached power is cut off to each of the different parts of the camera. The same concept goes for each of the different parts of the camera body that do not receive power.

19. Regarding **claim 15**, Kido discloses that the camera body (2) includes a flash control circuit (ref. no. 214, paragraph 0076).

20. With regard to **claim 18**, Kido discloses that the camera body (2) includes a memory card (18) and a recording image generating part (211g) for storing the image data.

21. **Claim 19** is considered a method claim corresponding to claim 11. Please see the discussion of claim 11 above.

22. **Claim 20** is considered substantively equivalent to claim 12. Please see the discussion of claim 12 above.

23. As for **claim 21**, Official Notice is taken as to the fact that it is well known to include a plurality of interchangeable lenses in an interchangeable lens system. A plurality of interchangeable lenses gives the user a number of options when composing an image. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plurality of interchangeable lens to give the user a plurality of options when composing an image. When used with the teachings of both Kido and Arai it would have been obvious to detect whether or not the other lens units are connected to the digital camera.

Allowable Subject Matter

24. Claims 3-4 and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2612

25. The following is a statement of reasons for the indication of allowable subject matter:

Regarding *claims 3 and 16*, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that when the detector detects that the image sensing unit is not connected to the camera body, the power supply controller does not supply power to the flash control circuit.

As for *claims 4 and 17*, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that when image sensing unit is connect by way of a cable and the cable has a length longer than a predetermined length, the power supply controller does not supply power to the flash control circuit.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-6306 (For either formal or informal communications intended for entry. For informal or draft communications, please label **"PROPOSED"** or **"DRAFT"**)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (703) 305-1460. The examiner can normally be reached on Monday through Thursday from 7:00 am to 5:30 pm EST.

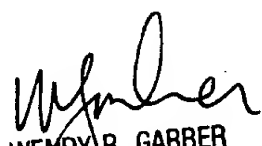
Art Unit: 2612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service desk whose telephone number is (703) 306-0377.



JMV
6/11/03



WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600